REMARKS

The present Amendment amends claims 1, 3-7, 9, 10, 12, 14 and 15. Therefore, the present application has pending claims 1, 3-7, 9, 10, 12, 14 and 15.

Claims 1, 3-7, 9, 10, 12, 14 and 15 stand rejected under 35 USC §102(b) as being anticipated by Aharoni (U.S. Patent No. 6,014,694). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1, 3-7, 9, 10, 12, 14 and 15 are not taught or suggested by Aharoni whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe the features of the present invention as recited in the claims. Particularly, amendments were made to the claims to recite that the present invention is directed to a motion picture transmission method and apparatus for transmitting a motion picture signal from an input terminal to a plurality of video reception units, respectively, through a video transmission unit including a compression processing unit and a plurality of transmission lines, each of which has a different transmission speed.

According to the present invention the method includes generating at least Intra (I) picture and a plurality of Predictive (P) pictures relating to each picture of the motion picture signal in the compression processing unit, storing at least the I picture and a plurality of the P pictures in a memory unit of the video transmission unit, and transmitting the I picture and a different number

8

of P pictures in response to different transmission speeds of a plurality of the transmission lines from the I picture and a plurality of P pictures stored in the memory unit of the video transmission unit to a plurality of video reception units, respectively.

The above described features of the present invention as now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention are not taught or suggested by Aharoni.

Aharoni teaches a system for adaptively transporting video over networks wherein the available bandwidth varies with time. As per Aharoni a video/audio codec is provided that functions to compress, code, decode and decompress video streams that are transmitted over networks having available bandwidths that vary with time and location. In Aharoni depending on the channel bandwidth, the system adjusts the compression ratio to accommodate a plurality of bandwidths ranging from 20 Kbps for POTS to several Mbps for switched LAN and ATM environments. Bandwidth adjustability is provided by offering a trade-off between video resolution, frame rate and individual frame quality. The system as taught by Aharoni generates a video data stream comprised of Key, P and B frames from a raw source of video. Each frame type is further comprised of multiple levels of data representing varying degrees of quality. In addition, several video server platforms can be utilized in tandem to transmit video/audio information with each video server platform transmitting information for a single compression/resolution level.

However, Aharoni fails to teach or suggest numerous features of the present invention as now recited in the claims. For example the present invention as recited in the claims includes first and second features not taught or suggested by Aharoni.

The first feature of the present invention includes generating at least Intra (I) picture and a plurality of Predictive (P) pictures relating to each picture of said motion picture signal in said compression processing unit, and storing at least the I picture and a plurality of the P pictures in a memory unit of the video transmission unit.

Thus, as per the first feature of the present invention the I picture and a plurality of P pictures relating to each picture of the motion picture signal are generated in the compression processing unit from each picture and the I picture and a plurality of P pictures are stored in the memory unit.

The second feature of the present invention includes transmitting the I picture and a different number of P pictures in response to different transmission speeds of a plurality of the transmission lines from the I picture and a plurality of the P pictures stored in the memory unit of the video transmission unit to a plurality of video reception units, respectively.

Thus, as per the second feature of the present invention compressing (encoding) only one video stream, I picture and a different number of P pictures from I picture and a plurality of P pictures stored in the memory unit are transmitted to respective reception unit in different transmission speeds.

The above described first and second features of the present invention as recited in the claims are not taught or suggested by Aharoni.

Aharoni discloses a system that functions to generate a prioritized video data stream including multiple levels from a raw source of video. This video stream as taught by Aharoni is stored in a file and accessed by the video server when servicing clients. Attention is directed to in col. 2, lines 29 to 32 of Aharoni.

Aharoni further discloses that the function of the video compression/file generator is to compress the raw video source into multiple levels of varying quality. In particular, as per Aharoni the raw video source is compressed into three types of data objects commonly referred to as frames. The three types of frames include Key frames, P frames and B frames. These frames are similar to the I frames, P frames and B frames, respectively. Attention is directed to col. 8, lines 54 to 63, of Aharoni.

Aharoni still further discloses that every frame (Key, P and B frames) output by the video compression/file generator is composed of data from all five levels. Thus, the video source file as per Aharon contains data representing a broad variation in output video quality and the video compression/file generator functions to assemble GOPs each having a particular combination of Key, P and B frames. Attention is directed to col. 10, lines 33 to 39, and also indicate diagrams illustrating five levels in Figs. 5, 6 and 7 of Aharoni.

Thus, in Aharoni some frames of a level may not be sent. That is, Aharoni discloses a technique of video compression/file generator 14 as shown in Fig. 1 thereof that converts a raw video source 12 shown in Fig. 1 into five levels (that is, quality of a frame) of each of Key frames, P frames and B frames. Those levels as per Aharoni are prepared previously and filed

11

in the video compression/file generator 14, and in response to the requirement of a client, the video compression/file generator 14 sends one frame selected from the five levels of the frames shown in Fig. 5, 6 and 7. These features as disclosed by Aharoni are entirely different from the features of the present invention as recited in the claims.

The amended claim 1 of the present application has the first feature of the present invention as described above. That is, I picture and a plurality of P pictures relating to each picture of the motion picture signal are generated in the compression processing unit from each picture (as ONE stream), and generated I picture and a plurality of P pictures are only stored in the memory unit. This first feature of the present invention is not taught or suggested by Aharoni. Specifically, the first feature of the present invention is not the same as or equivalent to the generation of five levels (quality of a frame) of Key, P and B and stored them in the memory, but only stores Key, P and B frame of a stream relating to each picture of the motion picture as taught by Aharoni.

Further, the amended claim 1 of the present application has a second feature of the present invention as described above. That is, I picture and a different number of P pictures from I picture and a plurality of P pictures stored in the memory units are transmitted in response to the different transmission speeds of a plurality of said transmission lines. This technique enables to adopt various rates of transmission with less size of previously-generated (compressed) frame data. It is suitable for embedding in a small equipment as web camera since the amount of the compression processing and the memory unit is reduced. This second feature of the present invention is entirely different from Aharoni which discloses that one of the five levels

12

(quality of a frame) is read out from the video compression/file generator 14 and transmitted to the network in response to the client.

Thus, Aharoni fails to teach or suggest <u>a motion picture transmission method and apparatus for transmitting a motion picture signal from an input terminal to a plurality of video reception units, respectively, through a video transmission unit including a compression processing unit and a plurality of transmission lines, each of which has a different transmission speed</u> as recited in the claims.

Further, Aharoni fails to teach or suggest <u>generating at least Intra (I) picture and a plurality of Predictive (P) pictures relating to each picture of the motion picture signal in the compression processing unit and storing at least the I picture and a plurality of the P pictures in a memory unit of the video transmission unit</u> as recited in the claims.

Still further, Aharoni fails to teach or suggest <u>transmitting the I picture and a different number of P pictures in response to different transmission speeds of a plurality of the transmission lines from the I picture and a plurality of P pictures stored in the memory unit of the video transmission unit to a plurality of video reception units, respectively</u> as recited in the claims.

Therefore, Aharoni fails to teach or suggest the features of the present invention and as such does not render obvious the claimed invention. Accordingly, reconsideration and withdrawal of the 35 USC §102(b) rejection of claims 1, 3-7, 9, 10, 12, 14 and 15 as being anticipated by Aharoni is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with

13

respect to the reference utilized in the rejection of claims 1, 3-7, 9, 10, 12, 14 and 15.

In view of the foregoing amendments and remarks, Applicants submit that claims 1, 3-7, 9, 10, 12, 14 and 15 are in condition for allowance. Accordingly, early allowance of the present application based on claims 1, 3-7, 9, 10, 12, 14 and 15 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.43300X00).

Respectfully submitted,

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14